ABSTRACT OF THE DISCLOSURE

A dynamic equivalent load P is calculated from data information of a rolling bearing. Next, a reliability coefficient a_1 is determined, a lubrication parameter a_L corresponding to a used lubricant is calculated, and a contamination degree coefficient a_c is determined in consideration of a material coefficient. A fatigue limit load Pu is calculated on the basis of the data information. Thereafter, a load parameter $\{(P - Pu)/C\} \bullet 1/a_c$ is calculated. On the basis of the lubrication parameter a_L and the load parameter $\{(P - Pu)/C\} \bullet 1/a_c$, a life correction coefficient a_{NSK} is calculated with reference to a life correction coefficient calculation map. The bearing life L_A is calculated by $L_A = a_1 \bullet a_{NSK} \bullet (C/P)^p$.